U.S. National Phase of PCT/JP2004/003622 Page 2

10/549906

IN THE CLAIMS:

, **Ť**

JC17 Rec'd PCT/PTO 20 SEP 2005

Claims 1-12 (Canceled)

1. (Original) A novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), characterized in that it exhibits peaks at diffraction angles shown in the following Table 1, in its powder X ray diffraction pattern:

Table 1
Diffraction Angle 2θ (°)
approximately 11.7
approximately 16.1
approximately 18.6
approximately 21.2
approximately 22.3
approximately 24.4
approximately 26.2

- 2. (Original) The novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 1, obtained by crystallization in an acidic state of a solution containing 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) in a temperature range of -5°C to 5°C.
- 3. (Currently Amended) The novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 1 or 2, wherein the solution containing 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) is an aqueous solution of an alkali metal salt of the compound.
 - 4. (Currently Amended) The novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-

• ¶

hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to any of Claims claim 1 to 3, obtained by controlling pH of an aqueous sodium hydrogen carbonate solution of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) at from 1 to 3 while cooling the solution in a temperature range from -5°C to 5°C.

- 5. (Original) A method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), comprising acidifying a solution containing 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) in a temperature range from -5°C to 5°C to cause formation of a crystal.
- 6. (Original) The method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 5, wherein the acidic state of the solution includes pH values of 1 to 3.
- 7. (Currently Amended) The method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 5 or 6, wherein the solution containing 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) is an aqueous solution of an alkali metal salt of the compound.
- 8. (Currently Amended) The method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to any of Claims claim 5 to 7, wherein the temperature of the solution under an acidic state is 0°C to 2°C.
- 9. (Currently Amended) A method for preparing an anhydrous form of a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), wherein a novel crystal obtained by the method according to any of Claims claim 5 to 8 is further frozen at temperatures from -5°C to -80°C, and then subjected to vacuum drying.

• 1

- 10. (Original) The method for preparing an anhydrous form of a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 9, wherein the conditions for vacuum drying include a degree of vacuum of 0.1 to 0.001 mmHg and a temperature of -20 to 35°C.
- 11. (New) The novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 2, wherein the solution containing 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) is an aqueous solution of an alkali metal salt of the compound.
- 12. (New) The novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to claim 2, obtained by controlling pH of an aqueous sodium hydrogen carbonate solution of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) at from 1 to 3 while cooling the solution in a temperature range from -5°C to 5°C.
- 13. (New) The novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to claim 3, obtained by controlling pH of an aqueous sodium hydrogen carbonate solution of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) at from 1 to 3 while cooling the solution in a temperature range from -5°C to 5°C.
- 14. (New) The method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to Claim 6, wherein the solution containing 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) is an aqueous solution of an alkali metal salt of the compound.

• •

- 15. (New) The method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to claim 6, wherein the temperature of the solution under an acidic state is 0°C to 2°C.
- 16. (New) The method for preparing a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) according to claim 7, wherein the temperature of the solution under an acidic state is 0°C to 2°C.
- 17. (New) A method for preparing an anhydrous form of a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), wherein a novel crystal obtained by the method according to claim 6 is further frozen at temperatures from -5°C to -80°C, and then subjected to vacuum drying.
- 18. (New) A method for preparing an anhydrous form of a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), wherein a novel crystal obtained by the method according to claim 7 isfurther frozen at temperatures from -5°C to -80°C, and then subjected to vacuum drying.
- 19. (New) A method for preparing an anhydrous form of a novel crystal of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), wherein a novel crystal obtained by the method according to claim 8 is further frozen at temperatures from -5°C to -80°C, and then subjected to vacuum drying.